9051 Mira Mesa Blvd, #910094
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Vimentin Bovine

Bovine Vimentin
RCP2552

Product Overview

Name	Vimentin Bovine
Description	
Bovine Vimentin	
Accession (Primary)	P48616
Synonyms	
Vimentin, Vim, FLJ36605.	
Introduction	
Vimentin expression in human malignant glioma cells depends on cellular density, algorithms of drug delivery and chemo/radio treatment. Vimentin and detyrosinated microtubules provide structural support for the extensive microtentacles observed in detached tumor cells and a mechanism to promote successful metastatic spread. Primary colorectal carcinomas display aberrant expression of vimentin, and have activated Notch and TGFbeta signaling pathways. Vimentin is a strong arterial substrate for transglutaminases. Transglutaminase-mediated vimentin dimerization results in a novel unifying pathway by which vasodilatory and remodeling responses may be regulated. Ablation of vimentin expression inhibits migration and invasion of colon and breast cancer cell lines. Vimentin is the main intermediate filament protein in mesenchymal cells and is therefore of value in the differential diagnosis of undifferentiated neoplasms.	
Source	
Bovine Lens.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
The protein (1mg/ml) was lyophilized from a 1mg/ml solution containing 10mM sodium phosphate pH 7.5, 6M urea, 2mM DTT, 1mM EDTA and 10mM methylammonium chloride.	
Stability	
Lyophilized Bovine Vimentin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution BovineVimentin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	

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Purity

Greater than 98.0% as determined by SDS-PAGE.

Solubility

It is recommended to reconstitute the Bovine Vimentin in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Reconstitution to filaments

After vimentin is dissolved in 6M urea buffer (see above), protofilaments and filament complexes are obtained by dialyzing the resulting polypeptide solution stepwise to a concentration of 4M urea and then to low salt condition (50mM NaCl, 2mM dithiothreitol, 10mM Sodium Phosphate, pH 7.4). For immunization purposes, the solution can be further dialyzed against PBS (phosphate buffered saline, e.g. Dulbecco''s PBS). - Hatzfeld M. and Franke W.W. (1985). J. Cell Biol. 101, 1826-1841. - Hatzfeld M. et al. (1987). J. Mol. Biol. 197, 237-255.

Precautions

Vimentin Bovine is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P48616)